only be necessary to briefly refer to a very few points not specially noted in the former.

As the title suggests, the book comprises the *elements* of *physiology,* and this it really is. Few text-books now available for use in the schools under the title of physiology are such in fact. Most are more or less cumbered with anatomy, hygiene, etc., and the physiology is thus confused with other matter. Without here considering the relative merits or demerits of these points, it is worth while emphasizing the fact that in this we have a book of essentially pure physiology, based on adequate and well-established facts. In its size and the scope of its matter it comes well within the time usually given to the subject in the average school. In its mechanical features the book is worthy of all praise. C. W. H.

Practical Physiological Chemistry. By Philip B. Hawk, M.S., Ph.D. 416 pages, illustrated. Philadelphia, P. Blakiston's Son & Co. 1907. Price, $4.00.

The appearance of another work on physiological chemistry is a further evidence of the rapid growth of this department of science in our American universities, and a proof, also, that something more than the old, so-called "medical chemistry" is beginning to find favor in our schools of medicine. This book by Dr. Hawk is written for students of medicine and general science, who have already secured a good groundwork in the more fundamental branches of chemistry, and presents a very good outline of those facts of physiological chemistry which may be clearly demonstrated in a laboratory course. While the title might be taken to indicate that the work is a laboratory manual only this is by no means the case, as many of the discussions are full enough to constitute a general treatise on the subject.

In an experimental way the book presents not only the usual general tests and qualitative reactions, but also a very considerable number of quantitative methods applicable in physiological-chemical investigations. Most of these are clearly described, and are full enough for working conditions, but in a few cases the value to the student would be greatly increased by the addition of fuller explanations. For example, in describing the determination of total and inorganic sulphates in the urine practically nothing is said concerning the reasons for the several steps, and at first sight the student is very likely to fail to recognize the real distinction between the two processes. A number of similar cases have been noticed.

The mechanical work on the book is most excellent. It is printed from clear type on good paper, and is bound in such a manner that it remains flat when opened on a table, a good quality not very often found in books intended for the laboratory. J. H. Long

Elements of Physical Chemistry. By Harry C. Jones. Third Edition. 8vo. Pp. 650. New York, The Macmillan Company. 1907.

This text-book is so well known that the appearance of a new edition calls for only a brief statement in regard to the changes that have been made in it.

The revised edition follows very closely the plan of the first, but it has been somewhat enlarged by the addition of matter pertaining to recent advances in the science. The chief additions deal with Thomson's work on electrons, Morse's work on osmotic pressure, recent work on radioactivity, and there are about twenty pages devoted to the author's hydrate theory and his work on conductivity in mixed solutions. There are many minor changes, and some of the rather complicated cases of equilibrium discussed in the first edition have been wisely omitted. Many references to the original literature have been added, which make the book a valuable one for reference.

H. W. Foote

Outlines of Psychology. By Wilhelm Wundt. Translated by C. H. Judd, Ph.D. Third English from the seventh revised German edition. Leipzig, Wm. Englemann. Pp. xxiii + 392.

The third edition of the English translation of Wundt's "Outlines" brings the work to the English-speaking student as it appears in